

Install Monterey/Big Sur on any X79 Motherboard Huananzhi Chinese gigabyte etc and PowerManagement

Beitrag von „robcodemax“ vom 16. Dezember 2021, 20:54

First of all a great thanks to [@MaLd0n](#) for all the help that he gave me by editing my DSDT.

This guide is for those who are using X79 Motherboard and are

1. unable to install mac
2. Unable to boot if they enable HYPERTHREADING in thie bios.
3. Having random reboots while booting.
4. Powermanagement Issue.

You can use this EFI for Mac OS Monterey or Big Sur

Installation:

1. Download the EFI Folder given in this guide and do the necessary changes mentioned in the **Changes to the Config File** section given below.
2. I am not going to cover how to install Mac. For that you will get lots of guides online.
3. I am Just going to give you my EFI folder. Use it and it will boot and install without any issue.
4. This EFI will work for both Dual CPU and Single CPU Board.

You need to do the following after downloading the EFI.

Changes to the Config File

1. Please add you own Platform Info

2. Also please add your UTBMap.kext file created using [USBToolbox](#) from windows (Use the windows.exe from from there). Also make sure you are add the [USBToolBox.kext](#) in the kexts folder and add it to the config. **While using the Discover ports option in the USB Tools app, insert the pendrive in all the available ports one by one and then create the kext.**

OR

If you don't want to do USB Mapping then just use the following USBMap.kext and it should work fine. I have added most of the USB ID's in the kext so it should work fine for most of the people.

[USBMap.kext.zip](#)

3. **SSDT-X79** included in the EFI folder already has everything needed so please don't change any settings in config. It will go smoothly.

4. Reboot

Enjoy....!!!

Note: For some motherboard using CpuTSCSync.kext causes Kernel Panic,

Solution: Use VoodooTSCSync.kext instead

Bios Settings:

1. If you still have issue while using my EFI then go into the Bios and Disable EHCI and XHCI Handoff or vice versa.

For PowerManagement do the following:

1. Create **SSDT-PMC, SSDT-PLUG (Only Needed in Some Cases)** from windows using SSDTTime.exe
2. Create **SSDT-PM** using sdtprgen method
3. Place these files in ACPI folder and also enable them in the config.plist

4. So you should have SSDT-X79 (See below note) , SSDT-PM, SSDT-PMC, SSDT-PLUG (**Optional**) ACPI.

Note: For some users SSDT-X79 is breaking power management so disable SSDT-X79 and add SSDT-EC.aml and SSDT-UNC.aml instead)

For Sandy Bridge CPU please enable 2 options in the Kernel > Patch Section

751AB9 to EB13B9

3E7539 to 3E9090

The entries are already added in my EFI just enable it. This is needed for Sandy Bridge CPU to get PowerManagement Working

Enjoy your PowerManagement

Once again please don't change anything in the config other than what is mentioned above

Audio:

Follow the guide in the link below

<https://www.insanelymac.com/fo...ith-dsdt-patching-easily/>

OR

If you want to get the audio (ALC 892) or any other Audio working then you need to patch DSDT. Mine is working with DSDT Patching. It was not working out of the box.

1. Extract you DSDT file using SSDTTime.exe from windows
2. Download Rehabman's Maclasl in mac and then apply the audio patch and check if Audio is working and if not then Also apply IRQ Fix in DSDT. Copy and paste the following patch after clicking on the patch button in Rehabman's Maclasl then copy and paste the following codes and then press Apply.
3. Now close that dialog and then press Compile Button and save the DSDT.aml and select

ACPI Machine Language in File Format

Code

```
1. # Maintained by: toleda for: github.com/toleda/audio_alc8xx
2. # File: hdef0-add_dsdt/HDEF-1.txt_v2.0
3. # Credit: PikeRAlpha
4. #
5. # Add_HDEF, for dsdts with no HDEF, set Audio_ID: 1
6. #
7. # 1. Add HDEF, set Audio ID:1/layout-id=1
8. into device name_adr 0x001B0000 set_label begin HDEF end;
9. into device label PCI0 insert
10. begin
11. Device (HDEF)\n
12. {\n
13. Name (_ADR, 0x001B0000)\n
14. Method (_DSM, 4, NotSerialized)\n
15. {\n
16. If (LEqual (Arg2, Zero)) { Return (Buffer() { 0x03 } ) }\n
17. Return (Package())\n
18. {\n
19. "layout-id", Buffer() { 0x01, 0x00, 0x00, 0x00 },\n
20. "PinConfigurations", Buffer(Zero) {},\n
21. "hda-gfx", Buffer() { "onboard-1" },\n
22. }}\n
23. }\n
24. }\n
25. end;
26. into definitionblock code_regex . insert
27. begin Store ("hdef0-add_dsdt/HDEF-1.txt_v2.0 dsdt edits, github.com/toleda", Debug) end
```

Alles anzeigen

Code

```
1. #Maintained by: RehabMan
2. #system_IRQ.txt
3.
4. # This can fix non-working audio and also has an affect on HPET.
5. #
6. # Use this if you have issues with patched AppleHDA (required on almost all laptops)
7. # or if you have issues with HPET (restart after wake).
8.
```

```

9. # IRQ fix
10. into device name_hid PNP0000 code_regex IRQNoFlags\s(\)\n\s+\{(\d+)\}
    remove_matched;
11. into device name_hid PNP0100 code_regex IRQNoFlags\s(\)\n\s+\{(\d+)\}
    remove_matched;
12. into device name_hid PNP0B00 code_regex IRQNoFlags\s(\)\n\s+\{(\d+)\}
    remove_matched;
13. into device name_hid PNP0103 code_regex IRQNoFlags\s(\)\n\s+\{.*\}
    removeall_matched;
14. into device name_hid PNP0103 code_regex
    Name\s(\([^,]+),\sResourceTemplate\s(\).*\n\s+\{((?:.\n)*)\}\) replace_matched
15. begin
16. Name (%1, ResourceTemplate())\n
17. {\n
18. IRQNoFlags() { 0, 8, 11, 15 }\n
19. %2
20. }\n
21. end;

```

Alles anzeigen

4. Place that DSDT.aml in ACPI Folder and also add it in config.plist (You can use OpenCore Configurator to do that)

5. Add Boot Args. Your alcid may vary check the [AppleALC guide](#)

Code

```
1. alcid=1
```

6. Reboot and Enjoy your Audio.

OR

You can try to use one of the following SSDT-HDEF Patch. It may or may not work for you. Also you would require SSDT-HPET.aml along with it which you can create using ssdtime app.

[SSDT-HDEF-edited.aml](#) or [SSDT-HDEF.aml](#)

Downloads:

If the new EFI Doesn't work then use the old one

UPDATED EFI OC 0.7.7:
[EFI_OC_0.7.7_X79_MOTHERBOARD_28-01-2022.zip](#)

OLD EFI Folder: [EFIFORX79MOTHERBOARD.zip](#)

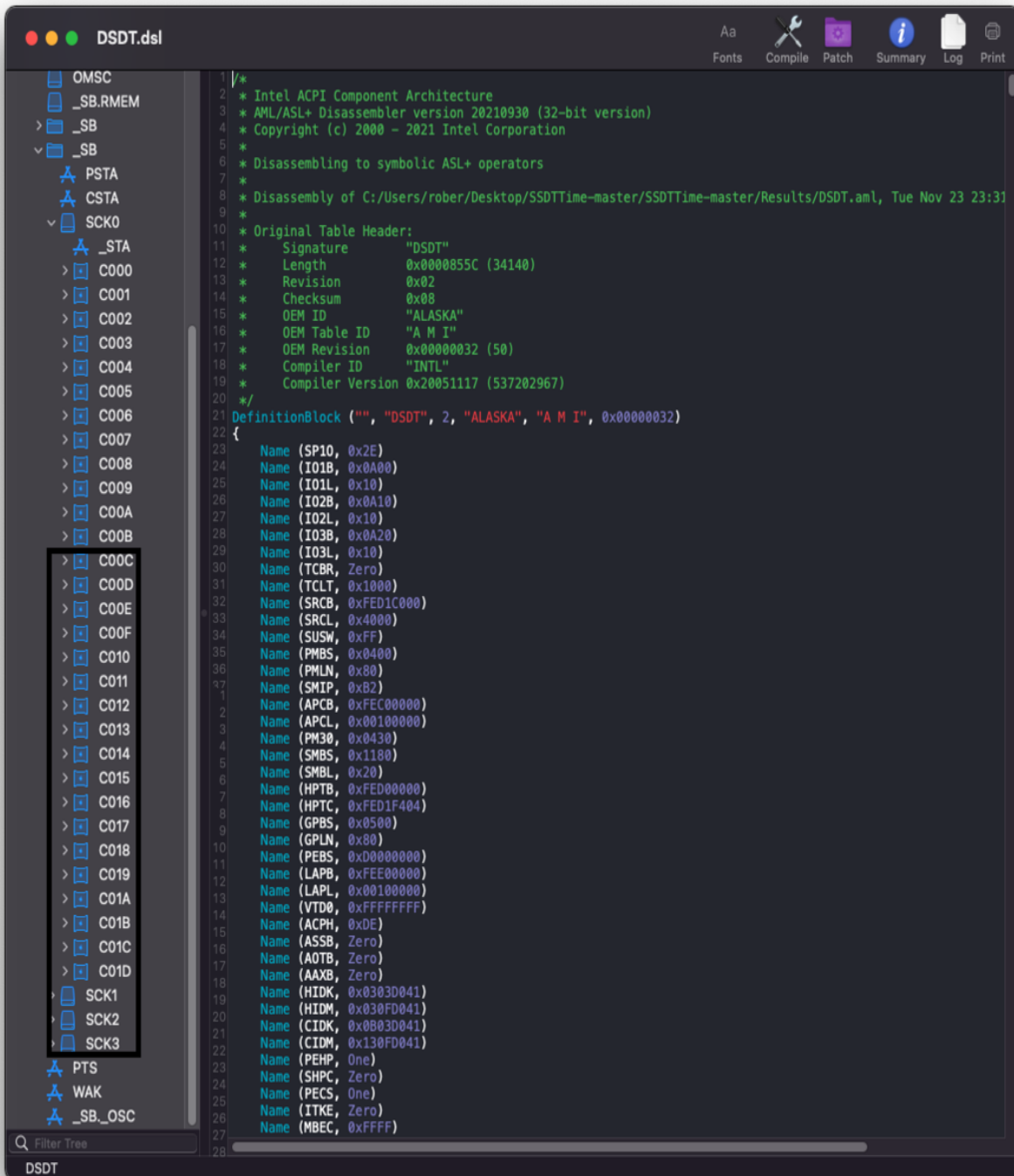
Bonus:

Those who are using Huananzhi-X79 Deluxe board can use the following patched DSDT which has all the necessary patches. Even the Audio patch so no need to use SSDT-HDEF.aml

[DSDT_Huananzhi_X79_Deluxe.aml](#)

Troubleshooting:

Multiple Reboot: Some times it takes multiple reboots to get into the system. It gets stuck in the following then follow the below given solution.



4. Place this DSDT.aml in the ACPI Folder

5. Reboot.

Now there will be no random reboots while rebooting.